Tammy L. Jones-Lepp, Supervisory Research Chemist, in EPA's National Exposure Research Laboratory

Exposure Methods and Measurements Division Mailing Address

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Area of Expertise: The scope of my research has focused on solving analytical problems relating to the detection, speciation, and identification of emerging contaminants by mass spectrometry and applying those results to understanding environmental exposures. My specialty is environmental mass spectrometry and environmental forensics of non-targeted contaminants. Particular environmental chemistry research projects have included developing analytical environmental chemistry methods and application of those methods to detect emerging contaminants (e.g., algal toxins, tamoxifen, macrolide antibiotics, illicit drugs), human waste markers, organometallics (e.g., organotins), textile dyes, explosives, and pesticides, in a variety of environmental matrices [i.e., source waters, wastewater, biosolids, tissue (plant and fish), sediments, and soils]. I have published over 40+ authored/co-authored peer-reviewed journal articles, several book chapters and two books (see publication section). Co-developed an EPA analytical method (SW-8321), for the Office of Solid Waste (OSW), for hard-to-analyze non-volatile organic compounds, and developed the first EPA-approved high performance liquid chromatography (HPLC) mass spectrometry (MS) analytical method (SW-8323) for organotins for OSW.

Select Publications:

- Jones-Lepp TL, Taniguchi-Fu RL, Morgan J, Nance Jr T, Ward M, Alvarez D, Mills L "Analytical approaches exploring the connection between endocrine-active pharmaceuticals in water to effects in fish,", Analytical and Bioanalytical Chemistry, 407(21), pp 6481-6492, 2015
- Jones-Lepp TL "Occurrence, effects and methods for antibiotics and illicit drugs in the environment," In: Pharmaceutical Accumulation in the Environment; Goldstein, W (eds), Taylor and Francis, 2014
- Jones-Lepp TL "Final Report: Toolbox of analytical chemistry methods that identify and quantify endrocrine-active pharmaceuticals (EAPs) plus major metabolites in aqueous samples (waste water, surface waters) and plasma.", EPA/600X-14/351, September 2014
- Jones-Lepp TL "Four Fish Kills Spanning 2011 2013 in the Red River Watershed: Beaver Creek to Lake Texoma, Oklahoma," EPA/600/R-14/057, April 2014
- Wilson D, Jones-Lepp TL, "Identifying Sources of Emerging Contaminants and Monitoring their Transport in the Subsurface after Effluent Vadose Injection, Lake Havasu City, Arizona," Environmental Engineering and Geoscience, August 2013, XIX (3), pp 231-251
- Jones-Lepp TL, Sanchez CA, Alvarez DA, Wilson D Taniquchi-Fu R "Point sources of emerging

contaminants along the Colorado River Basin: Impact on water use and reuse in the arid southwest", Sci Total Environ, 430, 237-245, 2012

View more research publications by <u>Tammy Jones-Lepp</u>.

Education:

- M.Sc., Environmental Analytical Chemistry, 1992, University of Nevada Las Vegas
- B.S., Chemistry, 1982, University of Nevada Las Vegas

Professional Experience:

Honors and Awards:

- 2013 USEPA ORD Teamwork Award for collaborative research on the endocrine active pharmaceutical team.
- 2011 *USEPA ORD Science Achievement Award* (SAA) *in Chemistry* for "Microbial Source Tracking Team"
- 2006 USEPA ORD Scientific and Technology Achievement Award (STAA) Level III for the journal article: "Polar Organic Chemical Integrative Sampling (POCIS) and LC-ES/ITMS for Assessing Selected Prescription and Illicit Drugs in Treated Sewage Effluents."
- 2000 USEPA Science Achievement Award (SAA) in Chemistry
- 1995 Arthur S. Flemming Award for Excellence in Government Service Scientific category. A non-Agency award for Excellence in Government Service Scientific category.